



STATUS REPORT

Progress and Improvements

DPW BUREAU/OFFICE Back River Wastewater Treatment Plant (Back River)

Date 9/2/2022

Parameters	Week ending 8/19/22	Week ending 8/26/22	Permit limit	Meeting Requirement
Total Suspended Solids (TSS)	<5.0 mg/l	<5.0 mg/l	15 mg/l	Yes
Biochemical oxygen demand (BOD)	<2.0 mg/l	2.0 mg/l	15 mg/l	Yes
Total phosphorus (TP)	0.12 mg/l	<0.10 mg/l	0.30 mg/l	Yes
Ammonia (NH3)	0.9 mg/l	0.2 mg/l	3.0 mg/l	Yes
Total nitrogen (TN)	2.3 mg/l	2.1 mg/l	4.0 mg/l	Yes
E-coli	2 MPN*/100 ml	2 MPN*/100 ml	126 MPN*/100 ml	Yes

MPN = Most Probable Number

*** Data based on preliminary numbers**

Personnel Updates

On August 20, 2022, the Baltimore City Department of Public Works (DPW) hosted a hiring event for various maintenance positions at Back River. DPW conducted rigorous personnel interviews on-site and extended 12 offers to qualified talent, and all accepted the positions. Given the success of this event, DPW is already ideating similar recruitment initiatives to occur shortly.

Maintenance Updates

A repair assessment is underway for Primary Settling Tank (PST) #5 to order appropriate materials. The repair assessment reviews all mechanical operations of the PST to create a repair scope of work for the PST. The assessment could not be done until the cleaning was completed. After cleaning PST #5, only PST #6 remains to be cleaned and assessed for repairs, which we expect to be completed by the end of the year. The plant will have a fourth PST, #7, in service as of late September and two others, #2 and #9, by January 2023. Plant operations require four small PSTs in service for full treatment. Back River has 11 PSTs total (two large and nine small). By January 2023, Back River will have two large and four small PSTs available for service.

In-Ground Digester cleaning and repairs for #1 and #4 are underway. Replacement of the gas compressor mixers and valves is nearing completion, with the solids removal on pace for completion near the end of 2022. The repairs of the in-ground digester will provide needed redundancy to assist during the capital project SC 992, which will rehabilitate the remaining in-ground digesters and the egg-shaped digesters. Digestion reduces the amount of biosolids the plant will need to process and remove. There are two benefits of digestion, reduced quantity of biosolids and the creation of methane gas used to generate power. Having in-ground digesters 1 & 4 back will help provide redundancy to the remaining system in case there are any breakdowns.

Summary

As of August 31, 2022, all parameters are currently under permit limits from preliminary August reports, and Back River has maintained compliance for the past 16 weeks. DPW continues to work with state and community partners to maintain compliance. We want to thank the hundreds of Back River staff who work daily to deliver best-in-class service to the Baltimore metropolitan area.